



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3518-3**Job Sheet 188559****Part No:** D3518-3**Job Qty:** 6 pcs**Part Name:** Ball Joint End**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 1/11/19**Job Tracking No:****Due Date:** 1/16/19**Created By:** Chantal Lavoie**Type:** Stock**Description:****Note:** DWG REV B IPP Rev:A New Issue 06-11-22 JLM IPP rev B rev b dwg 07.04.09 EC**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	6 pcs 6xCP	1/16/19	1/16/19	0.00	0.00	Purchasing - 1		JAN 11 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	6 pcs 6xCP	1/16/19	1/16/19	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		JAN 11 2019
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



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CANADA
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www.dartaerospace.com

Container No: S144263**Part:** D3518-3**Job No:** 188559**Serial No/Batch:** S144263**Revision:****Inspector:****Exp Date:****Instructions:** Various STC's**Date:** 01/11/19

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					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	DAS
120	QC 6	6 pcs	1/16/19	0.00 0.00	QC 6 - 38	38
					QC 6 - 42	9-89
					QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
130	Packaging 3-1 - Stock - B4B	6 pcs	1/16/19	0.00 0.00	Packaging 3 - 1 - B4B	51038 31 JAN 17 2019
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	DAS
140	QC 21 - SA	6 pcs	1/16/19	0.00 0.00	QC 21 - SA - 21	21 JAN 17 2019
Part Op 100 - Issue P/O: 42203 Purchase Part Number: 2458K14 Supplier: Mc Master Carr Certificate of conformity is Descriptions: required 110 - (Receive & Inspect for Damage & Mat'l Certs) 120 - (QC6- All purchased or subcontracted products) 130 - (Identify as per dwg & Stock Location: _____) 140 - (QC21- Final Inspection - Work Order Release)						

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
2458K14	Ball Joint Rod End D3518-3	6 Ea (1 ea)	100-Purchasing	5144188

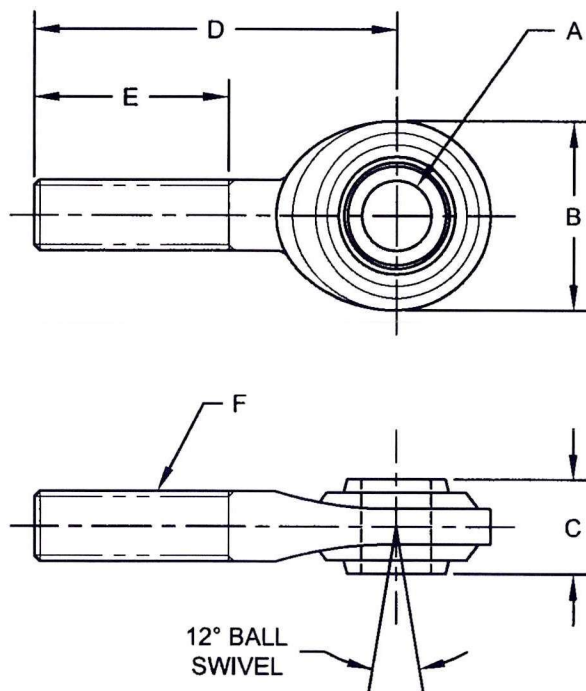
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	2458K14	6	0	0
Part Specifications				
Specifications could not be found.				

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DESIGN <i>B</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3518	REV. B SHEET 3 OF 3
DATE 06.10.23		TITLE BASKET (A119) STRUT	SCALE 1:1

SPECIFICATION CONTROL DRAWING



need w/o
x6

DART P/N	A	B	C	D	E	F	LOAD*	POSSIBLE SUPPLIER
D3518-3	0.375	1.00	0.50	1.938	1.25	3/8-24 UNF, RH	4012	McMASTER-CARR, P/N 2458K14

* Indicated load is Static Radial Load Capacity in lbs

NOTES:

- 1) TYPE: MALE THREADED SHANK CARBON-FIBER-REINFORCED PLASTIC RACE BALL JOINT ROD END
- 2) MATERIAL: ZINC PLATED STEEL HOUSING BALL WITH PTFE LUBRICATED CARBON-FIBER-REINFORCED PLASTIC RACE.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

RELEASED
06.11.17 *[Signature]*

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042203



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042203

PO Date: 1/8/19

Due Date: 1/11/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

E-MAILED
JAN 08 2019

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		5544T38	5544T382 6FT	Rod Ø20mm X 23-3/4	Firmed	-	1/11/19	12 ft	0 ft	12 ft	\$7.703333/ft	\$92.44
2	188287	59915K274		Rod End Bearing D4777-1	Firmed	-	1/11/19	15 pcs 15X	0 pcs	15 pcs	\$19.05/pcs	\$285.75
3		SWA6A-2000	69525K14 100 / per pk	1/8" Female Spade Connector	Firmed	-	1/11/19	300 Ea	0 Ea	300 Ea	\$0.0676/Ea	\$20.28
4		6628K23	6 ft	1144 Carbon Steel Rod, Ultra Strength, 1/4" Dia.	Firmed	-	1/11/19	12 ft	0 ft	12 ft	\$1.2816666/ft	\$15.38
5		8297T169	10/pk	Small O- Ring, Dash # 110	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.288/Ea	\$2.88
6		8297T174	10/pk	Large O- Ring, Dash # 115	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.375/Ea	\$3.75
7		8893K178	6 ft	Ø3/16 O1 Tool Steel Rod	Firmed	-	1/11/19	6 ft	0 ft	6 ft	\$1.301666/ft	\$7.81
8		8908K62	100/pk	Shaft	Firmed	-	1/11/19	100 ft	0 ft	100 ft	\$0.1425/ft	\$14.25

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Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
9		90977A165	10/pk	Coupling Nut	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$3.00/Ea	\$30.00
10		91595A446	25/pk	Dowel Pin	Firmed	-	1/11/19	25 Ea	0 Ea	25 Ea	\$0.3576/Ea	\$8.94
11		91611A213	100/pk	Slotted Spring Pin, Ø4.4mm X 30mm	Firmed	-	1/11/19	100 Ea	0 Ea	100 Ea	\$0.0797/Ea	\$7.97
12		91611A216	100/pk	Slotted Spring Pin, Ø4.4mm X 36mm	Firmed	-	1/11/19	100 Ea	0 Ea	100 Ea	\$0.0869/Ea	\$8.69
13		92620A875	1/pk	Cap Screw, 3/4-16 X 3 UNF 2A	Firmed	-	1/11/19	3 Ea	0 Ea	3 Ea	\$9.24/Ea	\$27.72
14		97484A055	250/pk	Rivet, Ø3/32 X 1/4	Firmed	-	1/11/19	250 Ea	0 Ea	250 Ea	\$0.02/Ea	\$5.00
15		98025A031	50/pk	Oversized Washer, 3/8 I.D.	Firmed	-	1/11/19	50 Ea	0 Ea	50 Ea	\$0.214/Ea	\$10.70
16		MDELINB1.250X3.000W	8739K61 4 FT	M Delrin Bar, White receive ft	Firmed	-	1/11/19	4 ft	0 ft	4 ft	\$33.89/ft	\$135.56
17		MDELINB1.500X3.000W	8739K67 4 FT	M Delrin Bar, White	Firmed	-	1/11/19	4 ft	0 ft	4 ft	\$40.24/ft	\$160.96
18		MT-NYLON 6-B0.250X2.000-W	8539K95 1/pc = 2 sf	Nylon 6 White Bar 0.250"H x 2"Wide	Firmed	-	1/11/19	2 sf	0 sf	2 sf	\$39.85/sf	\$79.70
19		2458K14 ✓ 188559	1/pk	Ball Joint Rod End	Firmed	-	1/11/19	6 Ea 6 X	0 Ea JAN 11 2019	6 Ea	\$5.67/Ea	\$34.02 38 9-89
20		3799K13	1/pk	Rod End, M8 x 1.25 X 50mm	Firmed	-	1/11/19	6 Ea	0 Ea	6 Ea	\$9.62/Ea	\$57.72
21		5274T691	10/pk	Vial, Ø1.58 X .73	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.704/Ea	\$7.04
22		60765K343	10/pk	Knob, M8 x 1.25	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$2.97/Ea	\$29.70

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Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
23		7813A47	1/pk	Hex L Key, 5mm	Firmed	-	1/11/19	6 Ea	0 Ea	6 Ea	\$1.58/Ea	\$9.48
24		84835A24	1/pk	Spring Plunger, .25 Nose Dia.	Firmed	-	1/11/19	6 Ea	0 Ea	6 Ea	\$2.82/Ea	\$16.92
25		91290A332	50/pk	Screw, M6 X 30mm SHCS	Firmed	-	1/11/19	50 Ea	0 Ea	50 Ea	\$0.1648/Ea	\$8.24
26		91595A485	10/pk	Dowel Pin, 6mm X 60mm	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.86/Ea	\$8.60
27		91595A567	10/pk	Dowel Pin, 8mm X 30mm	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.759/Ea	\$7.59
28		91595A741	5/pk	Pin, Dowel, 12mm X 36mm	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$1.946/Ea	\$19.46
29		91611A159	200/pk	Slotted Spring Pin Ø3mm X 20mm	Firmed	-	1/11/19	200 Ea	0 Ea	200 Ea	\$0.0566/Ea	\$11.32
30		92605A166	5/pk	Socket Head Set Screw	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$1.028/Ea	\$10.28
31		92981A215	5/pk	Bolt, Shoulder, 8mm X 60mm	Firmed	-	1/11/19	100 Ea	0 Ea	100 Ea	\$3.26/Ea	\$326.00
32		94285A515	50/pk	Set Screw, M6 X 1 X 8	Firmed	-	1/11/19	50 Ea	0 Ea	50 Ea	\$0.2276/Ea	\$11.38
33		98541A139	10/pk	Ring, Retaining	Firmed	-	1/11/19	10 Ea	0 Ea	10 Ea	\$0.785/Ea	\$7.85
Grand Total:											\$1,483.38	

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PURCHASE ORDER PO042203



Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A016 PERSONNEL QUALIFICATION
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A032 DOCUMENT SPECIAL REQUIREMENTS
A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

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200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

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Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042203
Order Placed By
Chantal Lavoie

Page 1 of 2
01/08/2019

McMaster-Carr Number
6168959-04

Line	Product	Ordered	Shipped
2	59915K274 Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand	15 Each	15
3	69525K14 Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, 0.11" Wide x 0.02" Thick Tab, Packs of 100	3 Packs	3
5	8297T169 Hard Viton Fluoroelastomer O-Ring, Chemical-Resistant, 3/32 Fractional Width, Dash Number 110, Packs of 10	1 Pack	1
6	8297T174 Hard Viton Fluoroelastomer O-Ring, Chemical-Resistant, 3/32 Fractional Width, Dash Number 115, Packs of 10	1 Pack	1
8	8908K62 Spring-Back 304 Stainless Steel Wire, Matte Finish, 1-Foot Long, 0.059" Diameter, Packs of 100	1 Pack	1
9	90977A165 Medium-Strength Steel Coupling Nut, Grade 5, 3/8"-16 Thread Size	10 Each	10
10	91595A446 Alloy Steel Dowel Pin, 6mm Diameter, 16mm Long, Packs of 25	1 Pack	1
11	91611A213 Steel Slotted Spring Pin, 4mm Diameter, 30mm Long, Packs of 100	1 Pack	1
12	91611A216 Steel Slotted Spring Pin, 4mm Diameter, 36mm Long, Packs of 100	1 Pack	1
13	92620A875 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 3/4"-16 Thread Size, 3" Long, Fully Threaded, Packs of 1	3 Packs	3
14	97484A055 Large-Diameter Low-Profile Domed Head Rivets, Solid, 3/32" Diameter, 0.25" Long, Packs of 250	1 Pack	1
15	98025A031 Zinc Yellow-Chromate Plated Steel Oversized Washer, Grade 8, for 3/8" Screw Size, 0.406" ID, 0.812" OD, Packs of 50	1 Pack	1
19	2458K14 Lubrication-Free Ball Joint Rod End, 3/8"-24 Thread, Right-Hand	6 Each	6
20	3799K13 Partially Threaded Rod End Bolt, M8 x 1.25mm Shank Thread, 50mm Shank Center Length	6 Each	6
21	5274T691 Polypropylene Plastic Vials with Tight Fitting Lid, 0.5 oz./15 ml Capacity, Packs of 10	1 Pack	1
22	60765K343 Steel Round Knob with M8 x 1.25mm Threaded Through Hole, 25mm Diameter Head	10 Each	10
23	7813A47 High-Visibility Gold Ball-End L-Key, 5 mm Size	6 Each	6
24	84835A24 Press-Fit Ball-Nose Spring Plunger, Stainless Steel Nose with Steel Body, 0.31" Body Diameter, 8 to 16 lb. Nose Force	6 Each	6
25	91290A332 Black-Oxide Alloy Steel Socket Head Screw, M6 x 1 mm Thread, 30 mm Long, Packs of 50	1 Pack	1

DAS
38
3-89

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

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1270 Aberdeen St
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Page 2 of 2
01/08/2019

Line	Product	Ordered	Shipped
26	91595A485 Alloy Steel Dowel Pin, 6mm Diameter, 60mm Long, Packs of 10	1 Pack	1
27	91595A567 Alloy Steel Dowel Pin, 8mm Diameter, 30mm Long, Packs of 10	1 Pack	1
28	91595A741 Alloy Steel Dowel Pin, 12mm Diameter, 36mm Long, Packs of 5	2 Packs	2
29	91611A159 Steel Slotted Spring Pin, 3mm Diameter, 20mm Long, Packs of 200	1 Pack	1
30	92605A166 Stainless Steel Flat-Tip Set Screw, 18-8, M10 x 1.5 mm Thread, 25 mm Long, Packs of 5	2 Packs	2
31	92981A215 Alloy Steel Shoulder Screws, 8 mm Shoulder Diameter, 60 mm Shoulder Length, M6 x 1 mm Thread	100 Each	100
32	94285A515 Knurl-Grip Cup-Point Set Screws, Alloy Steel, M6 x 1 mm Thread, 8 mm Long, Packs of 50	1 Pack	1
33	98541A139 External Retaining Ring for 32 mm OD, Black-Phosphate 1060-1090 Spring Steel, Packs of 10	1 Pack	1